

ATIC Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP6979d**Specification**

ATIC Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P31939](#)**ATIC Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 471**Other Names**

Bifunctional purine biosynthesis protein PURH, Phosphoribosylaminoimidazolecarboxamide formyltransferase, 5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase, AICAR transformylase, IMP cyclohydrolase, ATIC, IMP synthase, Inosinicase, ATIC, PURH

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ATIC Antibody (C-term) Blocking Peptide - Protein Information**Name** ATIC ([HGNC:794](#))**Function**

Bifunctional enzyme that catalyzes the last two steps of purine biosynthesis (PubMed: [11948179](http://www.uniprot.org/citations/11948179), PubMed: [14756554](http://www.uniprot.org/citations/14756554)). Acts as a transformylase that incorporates a formyl group to the AMP analog AICAR (5-amino-1-(5-phospho-beta-D-ribosyl)imidazole-4-carboxamide) to produce the intermediate formyl-AICAR (FAICAR) (PubMed: [9378707](http://www.uniprot.org/citations/9378707), PubMed: [11948179](http://www.uniprot.org/citations/11948179), PubMed: [10985775](http://www.uniprot.org/citations/10985775)). Can use both 10-formyldihydrofolate and 10-formyltetrahydrofolate as the formyl donor in this reaction (PubMed: [10985775](http://www.uniprot.org/citations/10985775)). Also catalyzes the cyclization of FAICAR to IMP (PubMed: [11948179](http://www.uniprot.org/citations/11948179), PubMed: [14756554](http://www.uniprot.org/citations/14756554)). Is able to convert thio-AICAR to 6- mercaptopurine ribonucleotide, an inhibitor of purine biosynthesis used in the treatment of human leukemias (PubMed: [10985775](http://www.uniprot.org/citations/10985775))

target="_blank">10985775). Promotes insulin receptor/INSR autophosphorylation and is involved in INSR internalization (PubMed:25687571).

Cellular Location

Cytoplasm, cytosol {ECO:0000250|UniProtKB:P54113}

Tissue Location

Present in the heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas.

ATIC Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

ATIC Antibody (C-term) Blocking Peptide - Images**ATIC Antibody (C-term) Blocking Peptide - Background**

ATIC is a bifunctional protein that catalyzes the last two steps of the de novo purine biosynthetic pathway. The N-terminal domain has phosphoribosylaminoimidazolecarboxamide formyltransferase activity, and the C-terminal domain has IMP cyclohydrolase activity.

ATIC Antibody (C-term) Blocking Peptide - References

Sharma,S. Pharmacogenet. Genomics 19 (10), 823-828 (2009)Vergis,J.M. J. Biol. Chem. 276 (11), 7727-7733 (2001)